

Aesculap[®] Excia[®] 12/14

Hip Endoprosthesis System



Aesculap Orthopaedics

Excia®

Excellence in Arthroplasty



The Excia® Hip System is based on many years of experience with straight stem implants in France, where the first Excia® was implanted in April 2000.

Today, the Excia® system is used successfully throughout Europe, the US and Japan.

The Excia® system concept of using one instrument set for implantation with or without bone cement is time tested and has been subject to ongoing enhancements.

Excia® is one of the most important products in the Aesculap hip endoprosthesis range.



15 Years of Excia®

2000

Start Excia® Implantations

2001 – 2004

- Excia® Caspar Implantations
- Excia® Experience Meeting Lyon
- Excia® OrthoPilot® Navigation
- FDA Approval in USA

2005

1st Excia® in USA

2006 – 2009

- Excia® L 8/10 High Offset
- Excia® 12/14
- Excia® Curved MIS Wingprofler
- MHLW Approval in Japan



2010

Excia® 10 Years

2011 – 2014

- Excia® Hip Platform
- SFDA Approval in China
- More than 95,000 Excia® sold
- Publication on Excia® 7 year results

2015

Excia® 15 Years

Excia[®]

Excellence in Arthroplasty

Distinguished by

- ... design
- ... technique
- ... surface

The prosthesis design, implantation technique and implant surface form the foundation for success in primary hip replacement surgery.

Excia[®] is implanted using a rasp that works for both the cementless stem and the cemented stem with a distal centralizer.

The lateral offset of the Excia[®] stem increases with stem size, further enhancing the stability of the joint.

Excia[®] can be implanted with computer navigation and supports less invasive surgical techniques, thus making it well-equipped for the needs of advanced hip replacement surgery.



Excia[®]

Excellence in Arthroplasty

Distinguished by ... design



The Excia[®] straight stem is designed for implant longevity with or without bone cement – with standard or high offset.



Cementless design

Stem design with distal fit and proximal flanges for mechanical stability. Proximal fixation with the Plasmapore[®] coating.

Cemented design

Wingless stem design preserves bone near the trochanter. Flanges allow a good proximal fit within the cement mantle.

Perfect stem alignment with the distal centralizer.

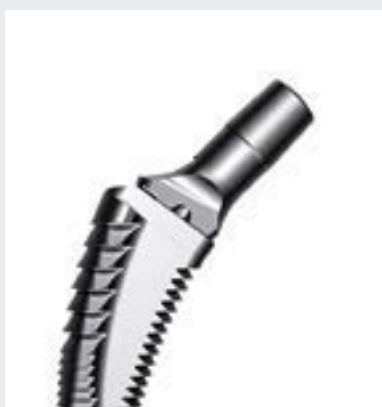


Two design options for implantation
with or without bone cement
with standard or high offset

Excia[®]

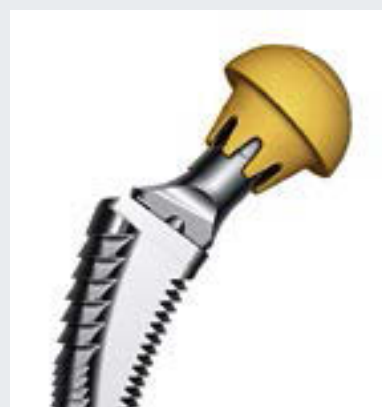
Excellence in Arthroplasty

Distinguished by ... technique



Lateral wing

Cementless and cemented Excia[®] stems differ by material, surface and especially by the lateral wing.



Rasps

The wing rasp is only used in the final step of the cementless implantation.

The modular trial necks with standard or high offset offer the possibility to simulate an optimal soft tissue reconstruction.

The stem rasps are so precisely machined that the trial reduction mimics the final implant accurately.

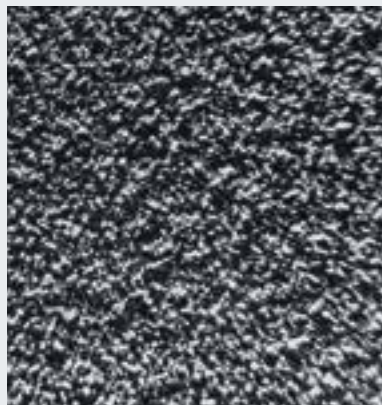
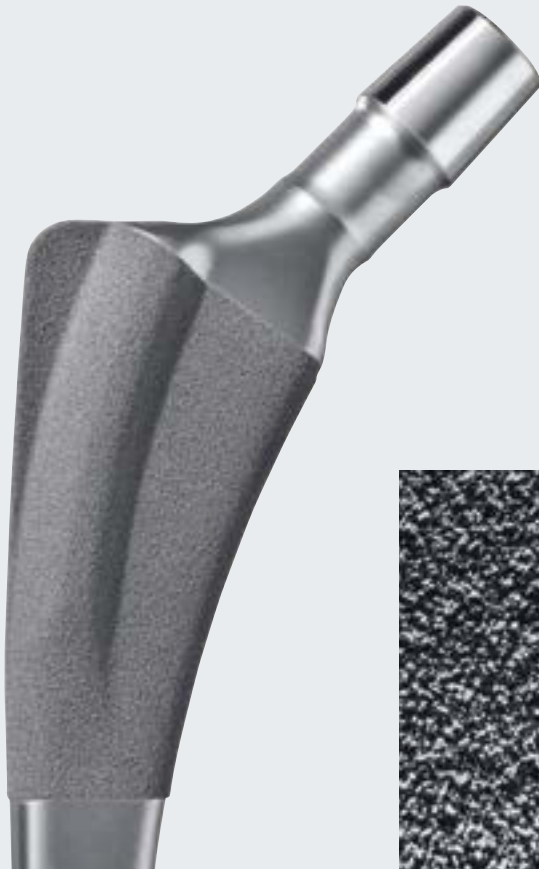


One instrument set for implantation
with or without bone cement
for all surgical approaches

Excia[®]

Excellence in Arthroplasty

Distinguished by ... surface



Implant surface

The cementless Excia[®] features a proximal rough Plasmapore[®] porous coating.

Plasmapore[®]

The rough 0.35 mm microporous pure titanium coating leads to direct bone apposition in the proximal part of the implant.

Results

This is confirmed by long-term clinical experience with various cup and stem implants coated with Plasmapore[®] since 1987.



Plasmapore® -

Aesculap's leading surface coating technology
with more than 25 years of clinical experience

Excia[®]

Surgical Technique



Osteotomy

The osteotomy angle is 55 degrees. All markings on the instruments and implants are in 55° reference to this plane.



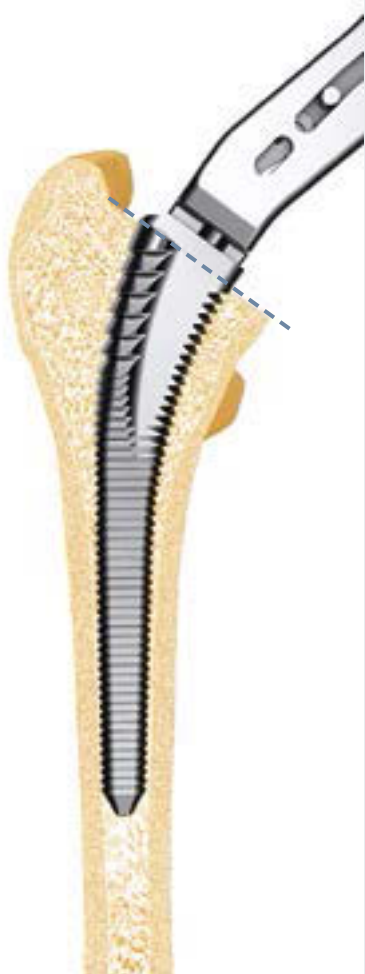
Opening the medullary canal

The medullary canal is opened with a box osteotome, which is inserted postero-laterally and determines the femoral anteversion angle of the implant.



Starter rasp

The starter rasp is an optional instrument which is used manually without any force to check the intramedullary situation. There is no need to use a hammer.



Rasp

The medullary canal is prepared with increasing sized rasps until the desired depth and stability are achieved.



Trial Reduction

In combination with the Excia® rasp the two modular trial necks with standard (135°) or high offset (128°, + 6 mm) simulate exactly the Excia® implant geometry.



The appropriate trial heads enable finally trial reduction and joint inspection with the Excia® rasp.

Excia[®]

Surgical Technique



Cement mantle thickness	Rasp size	Excia [®] stem size	Distal centralizer size
1.0 mm	12	12	12
1.5 mm	12	11	12
2.0 mm	12	10	12

Cemented implantation

For a cemented implantation the Excia[®] stem and centralizer sizes are selected according to the table above.

The distal centralizer size always corresponds to the size of the last rasp used.

The required thickness of the cement mantle can be adjusted from 1 to 2 mm, depending on the size of the final implanted stem.



Cementless implantation

For a cementless implantation, a groove for Excia's lateral wing is incised with the wing profiler, which is guided down a slot in the final stem rasp. The cementless Excia stem can be implanted after the trial reduction.

The size of the cementless Excia stem corresponds directly to the final stem rasp for a proper press-fit. The stem impactor controls the rotational alignment during implantation.

Biomechanical concept

Primary stability is achieved by a precise fit of the distal stem and rotational stability in the proximal area. Secondary stability results from bony ingrowth into the Plasmapore coating.

Excia® Cup Implants

Plasmafit® Poly



no screw holes,
with closing plug



Cup size	Liner size	Plasmafit® Poly	Symmetrical Vitelene®					Posterior wall Vitelene®				Asymmetrical Vitelene®			Symmetrical UHMWPE
			ø 22 mm	ø 28 mm	ø 32 mm	ø 36 mm	ø 40 mm	ø 22 mm	ø 28 mm	ø 32 mm	ø 36 mm	ø 22 mm	ø 28 mm	ø 32 mm	
			40	B	NV040T	NV183E	-	-	-	-	NV283E	-	-	-	
42	C	NV042T	NV184E	NV189E	-	-	-	NV284E	NV289E	-	-	NV384E	NV389E	-	-
44	D	NV044T	-	NV190E	-	-	-	-	NV290E	-	-	-	NV390E	-	-
46	E	NV046T	-	NV191E	NV201E	-	-	-	NV291E	NV301E	-	-	NV391E	NV401E	NV201
48	F	NV048T	-	-	NV202E	-	-	-	-	NV302E	-	-	-	NV402E	NV202
50	G	NV050T	-	-	NV203E	NV213E	-	-	-	NV303E	NV313E	-	-	NV403E	NV203
52	H	NV052T	-	-	NV204E	NV214E	-	-	-	NV304E	NV314E	-	-	NV404E	NV204
54	I	NV054T	-	-	NV205E	NV215E	NV225E	-	-	NV305E	NV315E	-	-	NV405E	NV205
56	J	NV056T	-	-	NV206E	NV216E	NV226E	-	-	NV306E	NV316E	-	-	NV406E	NV206
58	K	NV058T	-	-	NV207E	NV217E	NV227E	-	-	NV307E	NV317E	-	-	NV407E	NV207
60	L	NV060T	-	-	NV208E	NV218E	NV228E	-	-	NV308E	NV318E	-	-	NV408E	NV208
62	M	NV062T	-	-	NV209E	NV219E	NV229E	-	-	NV309E	NV319E	-	-	NV409E	NV209

ISOTAN®
Plasmapore®

Vitelene®

UHMWPE

Plasmafit® Plus



no screw holes,
with closing plug



with 3 screw holes



5 screw holes cranially,
2 screw holes caudally



Cup size	Liner size	Plasmafit® Plus	Plasmafit® Plus 3	Plasmafit® Plus 7	Symmetrical Biolog® delta				Symmetrical Vitelene®				
					ø 28 mm	ø 32 mm	ø 36 mm	ø 40 mm	ø 22 mm	ø 28 mm	ø 32 mm	ø 36 mm	ø 40 mm
40	A	NV140T	NV240T	NV340T*	-	-	-	-	NV182E	-	-	-	-
42	B	NV142T	NV242T	NV342T*	-	-	-	-	NV183E	-	-	-	-
44	C	NV144T	NV244T	NV344T*	NV089D	-	-	-	NV184E	NV189E	-	-	-
46	D	NV146T	NV246T	NV346T	NV090D	-	-	-	-	NV190E	-	-	-
48	E	NV148T	NV248T	NV348T	-	NV101D	-	-	-	NV191E	NV201E	-	-
50	F	NV150T	NV250T	NV350T	-	NV102D	-	-	-	-	NV202E	-	-
52	G	NV152T	NV252T	NV352T	-	NV103D	NV113D	-	-	-	NV203E	NV213E	-
54	H	NV154T	NV254T	NV354T	-	NV104D	NV114D	-	-	-	NV204E	NV214E	-
56	I	NV156T	NV256T	NV356T	-	NV105D	NV115D	NV125D	-	-	NV205E	NV215E	NV225E
58	J	NV158T	NV258T	NV358T	-	-	-	-	-	-	-	-	-
60	J	NV160T	NV260T	NV360T	-	NV106D	NV116D	NV126D	-	-	NV206E	NV216E	NV226E
62	J	NV162T	NV262T	NV362T	-	-	-	-	-	-	-	-	-
64	K	NV164T	NV264T	NV364T	-	-	-	-	-	-	-	-	-
66	K	NV166T	NV266T	NV366T	-	-	-	-	-	-	-	-	-
68	K	NV168T	NV268T	NV368T	-	NV107D	NV117D	NV127D	-	-	NV207E	NV217E	NV227E
70	K	NV170T	NV270T	NV370T	-	-	-	-	-	-	-	-	-

ISOTAN®
Plasmapore®

Biolog® delta

Vitelene®

Plasmafit® Plus



no screw holes,
with closing plug

with 3 screw holes

5 screw holes cranially,
2 screw holes caudally



Cup size	Liner size	Plasmafit® Plus	Plasmafit® Plus 3	Plasmafit® Plus 7	Posterior wall Vitelene®				Asymmetrical Vitelene®			Symmetrical UHMWPE
					ø 22 mm	ø 28 mm	ø 32 mm	ø 36 mm	ø 22 mm	ø 28 mm	ø 32 mm	
40	A	NV140T	NV240T	NV340T*	NV282E	-	-	-	NV382E	-	-	-
42	B	NV142T	NV242T	NV342T*	NV283E	-	-	-	NV383E	-	-	-
44	C	NV144T	NV244T	NV344T*	NV284E	NV289E	-	-	NV384E	NV389E	-	-
46	D	NV146T	NV246T	NV346T	-	NV290E	-	-	-	NV390E	-	-
48	E	NV148T	NV248T	NV348T	-	NV291E	NV301E	-	-	NV391E	NV401E	NV201
50	F	NV150T	NV250T	NV350T	-	-	NV302E	-	-	-	NV402E	NV202
52	G	NV152T	NV252T	NV352T	-	-	NV303E	NV313E	-	-	NV403E	NV203
54	H	NV154T	NV254T	NV354T	-	-	NV304E	NV314E	-	-	NV404E	NV204
56	I	NV156T	NV256T	NV356T	-	-	NV305E	NV315E	-	-	NV405E	NV205
58	J	NV158T	NV258T	NV358T	-	-	-	-	-	-	-	-
60	J	NV160T	NV260T	NV360T	-	-	NV306E	NV316E	-	-	NV406E	NV206
62	J	NV162T	NV262T	NV362T	-	-	-	-	-	-	-	-
64	K	NV164T	NV264T	NV364T	-	-	-	-	-	-	-	-
66	K	NV166T	NV266T	NV366T	-	-	-	-	-	-	-	-
68	K	NV168T	NV268T	NV368T	-	-	NV307E	NV317E	-	-	NV407E	NV207
70	K	NV170T	NV270T	NV370T	-	-	-	-	-	-	-	-

ISOTAN_F
Plasmapore®

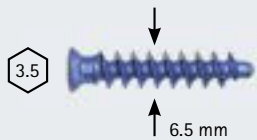
Vitelene®

UHMWPE



The central closing plug is automatically delivered with cup implants without screw holes.
The closing plug NV001T can also be ordered separately.

Plasmafit® – Cancellous Screws



16 mm	NV010T	44 mm	NV017T
20 mm	NV011T	48 mm	NV018T
24 mm	NV012T	52 mm	NV019T
28 mm	NV013T	56 mm	NV020T
32 mm	NV014T	60 mm	NV021T
36 mm	NV015T	64 mm	NV022T
40 mm	NV016T	68 mm	NV023T

ISOTAN_F

Excia®

Cemented PE Cups

Cemented PE Cup – Standard

Low Profile



Size	ø 22 mm	ø 28 mm	ø 32 mm
40 mm	NK810	-	-
42 mm	NK812	NK842	-
44 mm		NK844	-
46 mm		NK846	NK946
48 mm		NK848	NK948
50 mm		NK850	NK950
52 mm		NK852	NK952
54 mm		NK854	NK954
56 mm		NK856	NK956
58 mm		NK858	NK958
60 mm		NK870	NK960
62 mm		NK872	NK962
64 mm		NK874	NK964

UHMWPE

Cemented Vitelene® PE Cup – Standard

Low Profile



Size	ø 28 mm	ø 32 mm	ø 36 mm
40 mm	-	-	-
42 mm	NK842E	-	-
44 mm	NK844E	-	-
46 mm	NK846E	NK946E	-
48 mm		NK948E	-
50 mm		NK950E	NK976E
52 mm		NK952E	NK977E
54 mm		NK954E	NK978E
56 mm		NK956E	NK979E
58 mm		NK958E	NK980E
60 mm		NK960E	NK981E
62 mm		NK962E	NK982E
64 mm		NK964E	NK983E

Vitelene®

Cemented PE Cup – Snap Fit

Full Profile



Size	ø 28 mm	ø 32 mm
42 mm	-	-
44 mm	-	-
46 mm	NH947	-
48 mm	NH949	NH969
50 mm	NH951	NH971
52 mm	NH953	NH973
54 mm	NH955	NH975
56 mm	NH957	NH977
58 mm	NH959	NH979
60 mm	NH961	NH981
62 mm	NH963	NH983
64 mm	-	-

UHMWPE

Cemented PE Cup – without Snap Fit

Full Profile



Size	ø 28 mm	ø 32 mm
42 mm	-	-
44 mm	-	-
46 mm	NH946	-
48 mm	NH948	NH968
50 mm	NH950	NH970
52 mm	NH952	NH972
54 mm	NH954	NH974
56 mm	NH956	NH976
58 mm	NH958	NH978
60 mm	NH960	NH980
62 mm	NH962	NH982
64 mm	-	-

UHMWPE

Implant Materials

- BioloX® delta
Aluminium oxide matrix ceramic
(Al₂O₃/ZrO₂/ISO 6474-2)
- ISODUR_F
Cobalt-chromium forged alloy (ISO 5832-12)
- ISODUR_S
Stainless steel (ISO 5832-1)
- ISOTAN_F
Titanium forged alloy (ISO 5832-3)
- Plasmapore®
Pure titanium (Ti/ISO 5832-2)
- UHMWPE
Ultra high molecular weight polyethylene
(ISO 5834-2)
- Vitelene®
UHMWPE-XE vitamin E stabilized highly
crosslinked polyethylene
- PMMA
Polymethylmethacrylate

Implants

Excia® 12/14 cementless



Size	Standard	Lateralised*
8 mm	NK198T	NK598T
9 mm	NK199T	NK599T
10 mm	NK200T	NK600T
11 mm	NK201T	NK601T
12 mm	NK202T	Nk602T
13 mm	NK203T	Nk603T
14 mm	NK204T	NK604T
15 mm	NK205T	NK605T
16 mm	NK206T	NK606T
17 mm	NK207T	NK607T
18 mm	NK208T	NK608T

ISOTAN®_F

Excia® 12/14 cemented



Size	Standard	Lateralised*
9 mm	NK689K	—
10 mm	NK690K	NK990K
11 mm	NK691K	NK991K
12 mm	NK692K	NK992K
13 mm	NK693K	NK993K
14 mm	NK694K	NK994K
15 mm	NK695K	NK995K
16 mm	NK696K	NK996K
17 mm	NK697K	Nk997K
18 mm	NK698K	NK998K

ISODUR®_F

* Excia® L (lateralised) implants have an increased offset of 6 mm compared with Excia® standard and a reduced CCD angle of 128°

Ceramic modular prosthesis heads



12/14

Size	28 mm	32 mm	36 mm	40 mm
S	NK460D	NK560D	NK560D	NK750D
M	NK461D	NK561D	NK561D	NK751D
L	NK462D	NK562D	NK562D	NK752D
XL	—	NK563D	NK563D	NK753D

BioloX® delta

Distal centraliser



9 mm	NK089
10 mm	NK090
11 mm	NK091
12 mm	NK092
13 mm	NK093
14 mm	NK094
15 mm	NK095
16 mm	NK096
17 mm	NK097
18 mm	NK098

PMMA

Metal modular prosthesis heads



12/14

Size	28 mm	32 mm	36 mm	40 mm
S	NK429K	NK529K	NK669K	NK769K
M	NK430K	NK530K	NK670K	NK770K
L	NK431K	NK531K	NK671K	NK771K
XL	NK432K	NK532K	NK672K	NK772K
XXL	NK433K	NK533K	NK673K	NK773K

ISODUR®_F

IMSET Cement plug



10 mm	NK910
12 mm	NK912
14 mm	NK914
16 mm	NK916
18 mm	NK918

Composition:

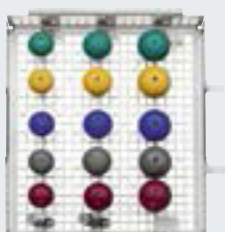
50 % gelatin (from pigs), 30 % glycerin, 20 % water
0.2 % methylparahydroxybenzoate

Instruments

NT330 Excia® 12/14 Basic Set



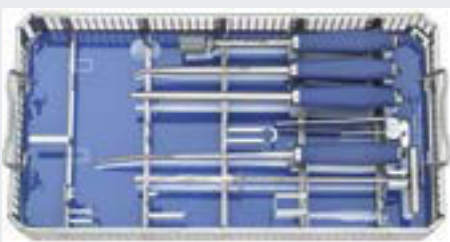
In the tray NT329R three rasp handles can be stored. The small tray for the trial components fits on top.



Small tray with Excia® 12/14 trial components.

Recommended container only for Excia® Basic Set NT330
Aesculap basic container 592 x 285 x 153 mm

NT300 Excia® Set for optional instruments



Recommended container for NT330 and NT300
Aesculap basic container 592 x 285 x 265 mm

Consisting of:

NT329R	Tray with supports and small tray for trial components 489 x 253 x 106 mm
JH217R	Lid
TF004	Grafic template

Excia® rasps

NT308R	Rasp size 8
NT309R	Rasp size 9
NT310R	Rasp size 10
NT311R	Rasp size 11
NT312R	Rasp size 12
NT313R	Rasp size 13
NT314R	Rasp size 14
NT315R	Rasp size 15
NT316R	Rasp size 16
NT317R	Rasp size 17
NT318R	Rasp size 18

Excia® 12/14 trial heads

Size	28 mm	32 mm	36 mm
S	NT356	NT366	NT376*
M	NT357	NT367	NT377*
L	NT358	NT368	NT378*
XL	NT359	NT369	NT379*
XXL	NT360	NT370	NT380*

Consisting of:

NT301R	Tray with supports 489 x 253 x 76 mm
JH217	Lid
TF003	Grafic template

ND844R	Insertion instrument
ND820R	Extraction instrument
NT321R	Wing profiler
NT118R	Modular box osteotome
ND017R*	Cross bar for rasp handle

Rasp handles

NT001R*	Lateral approach, straight
NT002R*	Posterior approach, straight
NT003R*	Anterior approach, straight
NT004R*	Lateral approach, offset left
NT005R*	Lateral approach, offset right
NT006R*	Anterior approach, offset left
NT007R*	Anterior approach, offset right

Excia® 12/14 trial necks

NT303R	Trial neck standard
NT305R	Trial neck lateralised

Optional instruments

ND060*	Impactor for prosthesis heads
ND845R*	Curved insertion instrument
ND847R*	Locked insertion instrument
ND472R*	Starter rasp
NT323R*	Canal finder
NG922*	Excia® cemented X-ray templates
NG923*	Excia® cementless X-ray templates

with * marked instruments please order separately

